EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE STATE HIGHWAY ADMINISTRATION:

	SPEC. SECTION	CATEGORY CODE NO.	QUANTITY	DESCRIPTION	
	817	900000	3 EACH	FOUR-CHANNEL LO	OP DETECTOR AMPLIFIER (DELAY OUTPUT)
	806	960022	8 EACH	12 IN. 1 WAY 3	SECTION (R.Y.G) TRAFFIC SIGNAL HEAD - MAST ARM MOUNT
	806	960048 6	1 X EACH		SECTION (DON'T WALK, WALK) PEDESTRIAN SIGNAL HEAD WITH KET - PEDESTAL POLE MOUNT
	806	960065	2 EACH	8 IN. 1 WAY 3 S	ECTION (R,Y,G) TRAFFIC SIGNAL HEAD - POLE MOUNT
	806	960068	1 X EACH		SECTION (DON'T WALK, WALK) PEDESTRIAN SIGNAL HEAD WITH KET - POLE MOUNT
	806	960070	1 EACH	12 IN. 1 WAY 3	SECTION (RA, YA, GA) SIGNAL HEAD - POLE MOUNT
<u>[6]</u>	>	965001	₹ EACH	PEDESTRIAN PUSH	
	816	971017	1 EACH	TELEMETRY MODUL	LLY ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH E, INTERSECTION MONITOR WITH BATTERY BACK-UP HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
	813	973023	43 S.F.	SHEET ALUMINUM	SIGNS:
				- 1 EACH	R3-6(L) SIGN (30 IN. X 36 IN.) (LANE USE CONTROL - LEFT AND THRU) MAST ARM MOUNT
				- 2 EACH	R3-3B SIGN (30 IN. X 30 IN.) (NO LEFT TURN OR U-TURN (SYMBOL)) MAST ARM MOUNT
				- 1 EACH	R3-5(L) SIGN (30 IN. X 36 IN.) (LANE USE CONTROL - LEFT ONLY) MAST ARM MOUNT
				- 2 EACH	R6-1(L) SIGN (36 IN. X 12 IN.) (ONE WAY) POLE MOUNT
				- 1 EACH	R5-1 SIGN (30 IN. X 30 IN.) (DO NOT ENTER) MAST ARM MOUNT
				- 1 EACH	D3-2 SIGN (VARIABLE X 16 IN.) (ADVANCE STREET NAME PANEL) MAST ARM MOUNT

GENERAL NOTES

- 1. FINAL GEOMETRICS AND GRADES SHALL BE CONFIRMED PRIOR TO THE INSTALLATION OF SIGNAL EQUIPMENT.
- 2. LOOP DETECTORS AND CONDUITS SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES TO VERIFY THE LOCATION OF ALL UTILITIES.
- 4. PAVEMENT MARKINGS DETAILED ARE PROPOSED AND ARE TO BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH S.H.A. STANDARDS. ALL OTHER PAVEMENT MARKINGS WILL BE INSTALLED AS PART OF THE HIGHWAY CONTRACT.
- 5. ALL LUMINAIRES MUST BE FULL CUT OFF.
- 6. WHEN INSTALLING THE SIGNAL HEADS, THE CONTRACTOR MUST LEAVE ENOUGH CABLE TO RELOCATE THEM FOR MAINTENANCE OF TRAFFIC.
- 7. REFER TO PAGES SN 2.1 THROUGH SN 2.10 FOR ADDITIONAL SIGNING AND PAVEMENT MARKING DETAILS.
- 8. ALL SIGNAL EQUIPMENT IS TO BE INSTALLED TO FINAL GRADE.

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE SUPPLIED AND/OR INSTALLED BY THE CONTRACTOR:

RUMMEL, KLEPPER

& KAHL, LLP

CONSULTING ENGINEERS

81 MOSHER STREET

BALTIMORE, MARYLAND 21217

SPEC. SECTION	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
104	120500	L.S.	MAINTENANCE OF TRAFFIC
205	203030	4 C.Y.	TEST PIT EXCAVATION
SP-555	585414 6 2	:35 \$9⊄ L.F.	12 IN. WHITE THERMOPLASTIC MARKING TAPE
SP-555	585416	250 L.F.	24 IN. WHITE THERMOPLASTIC MARKING TAPE
818	800000	1 EACH	FURNISH & INSTALL STEEL POLE WITH TWIN 50 FOOT AND 70 FOOT MAST ARMS
805	800000	50 L.F.	FURNISH & INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805	800000 6 7	80 8%5 L.F.	FURNISH & INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805	800000	65 L.F.	FURNISH & INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
	800000	1 EACH	FURNISH & INSTALL OPTICOM DETECTOR
810	800000	320 L.F.	FURNISH & INSTALL ELECTRICAL CABLE - 4 CONDUCTOR OPTICOM DETECTOR CABLE (NO. 20 AWG)
810	800000	3 EACH	FURNISH & INSTALL MICRO-LOOP PROBE SET WITH 1000 FT, LEAD-IN
801	801004 6	13 ⋈ C.Y.	FURNISH & INSTALL CONCRETE FOR SIGNAL FOUNDATION
810	802501 6 5	80 ≫≲ L.F.	FURNISH & INSTALL BARE STRANDED COPPER GROUND WIRE (NO. 6 AWG)
805	805011	10 L.F.	FURNISH AND INSTALL 1 IN. GALVANIZED STEEL ELECTRICAL CONDUIT FOR DETECTOR SLEEVE
805	805115 6 1	10 ⊅85 L.F.	FURNISH & INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
805	805118	210 L.F.	FURNISH & INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - BORED
805	805160	50 L.F.	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
2 807	807205	1 EACH	FURNISH & INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
811	811001 6	14 > EACH	FURNISH & INSTALL ELECTRICAL HANDHOLE
813	813015	43 S.F.	INSTALL OVERHEAD SIGN
818	818030	1 EACH	FURNISH & INSTALL STEEL POLE WITH A SINGLE 38 FOOT MAST ARM
818	818036	1 EACH	FURNISH & INSTALL STEEL POLE WITH A SINGLE 50 FOOT MAST ARM
	822002	440 L.F.	FURNISH & INSTALL ELECTRICAL CABLE - 12 PAIR JELLY-FILLED COMMUNICATION CABLE (NO. 19 AWG)
806	831010	3 EACH	FURNISH & INSTALL 250 WATT H.P.S. LAMP AND LUMINAIRE
804	837001 6	4 ¥ EACH	FURNISH & INSTALL GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH
814	860022	8 EACH	INSTALL 12 IN. 1 WAY 3 SECTION (R.Y.G) SIGNAL HEAD - MAST ARM MOUNT
814	860048 6	1 🕱 EACH	INSTALL 12 IN. 1 WAY 2 SECTION (DON'T WALK, WALK) PEDESTRIAN SIGNAL HEAD - PEDESTAL MOUNT
814	860065	1 EACH	INSTALL 8 IN. 1 WAY 3 SECTION (R.Y.G) SIGNAL HEAD - POLE MOUNT
814	860068 6	1 X EACH	INSTALL 12 IN. 1 WAY 2 SECTION (DON'T WALK, WALK) PEDESTRIAN SIGNAL HEAD - POLE MOUNT
814	860070	1 EACH	INSTALL 12 IN. 1 WAY 3 SECTION (RA, YA, GA) SIGNAL HEAD - POLE MOUNT
810	861104	1040 L.F.	FURNISH & INSTALL ELECTRICAL CABLE - 2 CONDUCTOR ALUMINUM SHIELDED
6 ≫√0	86+105	TS LATE	FURNISH & INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)
810	861107 6 3	10 № L.F.	FURNISH & INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
810	861108	2275 L.F.	FURNISH & INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
810	861116	790 L.F.	FURNISH & INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
810	861117	15 L.F.	FURNISH & INSTALL ELECTRICAL CABLE - 3 WIRE (NO. 4 AWG)
810	862101	2710 L.F.	FURNISH & INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
815	862102	825 L.F.	FURNISH & INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
6 347	B65201	I EACH	INSTALL PEDESTRIAN PUSHBUTTON AND SIGN
818	866104	3 EACH	FURNISH & INSTALL 20 FT. LIGHTING ARM ON SIGNAL STRUCTURE
818	868003 6	1 X EACH	FURNISH & INSTALL 10 FT. BREAKAWAY PEDESTAL POLE
816	871117	1 EACH	INSTALL NEMA SIZE '6' CABINET - BASE MOUNT (NOTE: 2-4 IN. AND 2-2 IN.90 DEGREE ANGLE CONDUIT BENDS AND CONTROL AND DISTRIBUTION FOR UNDERGROUND FEED) - B-6 POWER CONNECTION

SS-03 APPROVALS: REVISIONS: MDOT - STATE HIGHWAY ADMINISTRATION REVISION NO. 1

NEW SHEET TO REPLACE SHEET NO. 202

REVISION NO. 2

5/19/99 Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION LOG MILE # 13017503.65 CHIEF SIGNAL DESIGN SECTION REVISION NO. 6 EB MD 175 RAMP C @ SNOWDEN RIVER PARKWAY DRAWN BY: ASST. DISTRICT ENGINEER TRAFFIC GENERAL INFORMATION DES. BY: DK/DLA CHK. BY: HOWARD COUNTY: _ CHIEF TRAFFIC ENGINEERING DESIGN DIVISION TS/STD. NO.: SHEET NO. DATE: NOVEMBER, 1998 F.A.P. NO. 3820 202A OF 232 SCALE: N.T.S. S.H.A. NO. ____ H0764527I TEL: (410) 728-2900 FAX: (410) 383-3270 DIRECTOR OFFICE OF TRAFFIC & SAFETY